

Columbia University Bulletin

Fifty-ninth Series, No. 1

January 3, 1959

COURSES IN
PHYSICAL THERAPY
AND
OCCUPATIONAL THERAPY
COLLEGE OF PHYSICIANS AND SURGEONS



1959-1960

COLUMBIA-PRESBYTERIAN MEDICAL CENTER
630 WEST 168TH STREET
NEW YORK 32, N. Y.

Spec 6011
H 6011
Serigraph
C
1959-1960

INFORMATION

Application blanks and further information about the courses in this bulletin may be obtained from the Office of Physical and Occupational Therapy, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N.Y. The office is open weekdays 9 a.m. to 5 p.m.; Saturdays by appointment. Telephone: WAdsworth 3-2500, Extension 7941.

AUTUMN TERM

September 24, 1959, through January 28, 1960
Registration—September 21 through 23

SPRING TERM

February 3, 1960, through May 26, 1960
Registration—February 1 through February 2

COLUMBIA UNIVERSITY BULLETIN SERIES 59 • NO. 1 • JANUARY 3, 1959 • 6,000 COPIES

Issued at Columbia University, Morningside Heights, New York 27, N.Y., weekly from January for forty-five consecutive issues. Second-class mail privileges authorized at New York, N.Y., under the Act of August 24, 1912.

PRINTED FOR THE UNIVERSITY BY COLUMBIA UNIVERSITY PRESS

PHYSICAL THERAPY AND OCCUPATIONAL THERAPY

This bulletin describes two separate courses offered by Columbia University: Physical Therapy and Occupational Therapy. These courses are given at the College of Physicians and Surgeons and the Columbia-Presbyterian Medical Center under the auspices of the Department of Physical Medicine and Rehabilitation. The courses of study are approved by the Council on Medical Education and Hospitals of the American Medical Association and prepare the student to meet the qualifications for registration in either physical or occupational therapy. See pages 8-20 for physical therapy and pages 21-36 for occupational therapy.

ADMISSION

Prior to admission to professional courses in physical or occupational therapy, the applicant must have taken preprofessional subjects at an approved college of his choice to the extent of at least sixty semester credits. Should the student desire to complete this work at Columbia University, application should be made directly to Barnard College (undergraduate women), Columbia College (undergraduate men), or the School of General Studies (adult men and women).

Application for transfer to professional courses should be made on the official application form of the school in question and should be filed and accepted well in advance of the time the student expects to begin his studies. Acceptance of a student for admission is based on grounds of character and health as well as on the fulfillment of academic requirements. For further details on admission requirements and procedure see pages 10 and 24.

REGISTRATION

Before attending University courses, every student must register in person during the registration period which precedes each term. For the academic year 1959-1960 the registration periods are:

Autumn term: Monday, September 21, through Wednesday, September 23.

Spring term: Monday, February 1, through Tuesday, February 2.

The registration procedure is as follows:

1. The student reports to the Office of Physical and Occupational Therapy on the third floor of the College of Physicians and Surgeons, 630 West 168th Street, and fills out various forms giving information required for University records.

2. He has his program approved by the director.

3. He takes his completed forms to the Office of the Registrar and pays his fees in the Office of the Bursar.

The Office of the Registrar is open Monday through Friday, 9 a.m. to 5 p.m.

FEES

Tuition fees, the University fee, and laboratory deposits are payable each term in advance and as part of registration. If they are paid after the last day of registration (see the Academic Calendar), they will not be reduced and a late fee of \$6.00 will be im-

2 • FEES

posed. The student health and hospital fee is payable with the other fees for the autumn term and is for the entire academic year.

The following fees, prescribed by statute for *each autumn or spring term*, are subject to change at any time at the discretion of the Trustees:

University fee

Up to four points, inclusive	\$ 6.00
Over four points to eight points, inclusive	12.00
Over eight points but under twelve points	18.00
Twelve points or more	24.00
With the proviso that in no instance shall the amount of the combined University fee and tuition fee be less than	75.00
Registration only for research	75.00

Tuition fee

For all courses except where a special fee is fixed, per point	37.00
With the proviso that the fee for a program of fifteen or more points is	550.00

Clinical supervisory fee	12.00
--------------------------	-------

Student health and hospital fee (see below)	30.00
---	-------

Application fees and late fees

Application for admission	10.00
Application for each deficiency or special examination	10.00
Renewal of application for a degree (see below)	1.00
Late registration	6.00
Late application for a deficiency or special examination	5.00
Late application, or late renewal of application, for a degree or certificate	5.00

Rebates

The University fee, the student health and hospital fee, application fees, and late fees are not refundable. If a student withdraws from the School, the Registrar *may* authorize a partial return of tuition fees. If a rebate is allowed, it will be reckoned from the day on which the Registrar receives written notice from the student.

A deposit for the use of lockers, keys, apparatus, material, and the like is required in certain courses.

Acceptance fee. Within two weeks after an applicant has been notified that his application has been accepted, he must notify the director that he intends to matriculate and accompany his communication with a check or money order for \$50, payable to Columbia University. This acceptance fee will be retained by the University and, if the applicant does not register for the following academic year, it will not be returned, unless the University for any reason cancels the acceptance. If he registers in the courses for physical and occupational therapy in the class to which he has been admitted, the amount of the acceptance fee will be deducted from his tuition fees.

Student health and hospital fee. This fee will be used to pay the annual premium of the Associated Hospital Service of New York for hospital insurance and to pay part of the cost of the student health service. Students who already have hospital insurance will not be charged the cost of the premium.

Renewal of application for a degree. An application for a degree (except doctoral degrees) terminates at the next regular time for the issuance of diplomas subsequent to

the date of filing, but it may be renewed for a fee of \$1.00 each time that the candidate chooses to come up for consideration.

AUDITING COURSES

Degree candidates who have paid full tuition for the current term (\$550) may audit courses in any division of the University without charge. Application is made at the Registrar's Office, 315 University Hall, during the so-called late registration period in each term: Monday, September 28, through Saturday, October 3, for the autumn term; Monday, February 8, through Saturday, February 13, for the spring term. Applications may not be filed before or after these dates.

The Registrar's Office directs students to the rosters of auditable courses in each division of the University. For obvious reasons, elementary language courses, laboratory courses, and seminars will not be open to auditors. Other courses may be closed because of space limitations. In no case will an audited course appear on the student's record, nor is it possible to turn an audited course into a credit course by paying the fee after the fact.

GENERAL REGULATIONS

RESIDENCE

All women students under twenty-one years of age who are not living at home or with relatives are required to secure approval of their residence from the directors. Information concerning desirable accommodations may be obtained from the Physical and Occupational Therapy Office (see also page 4).

STUDENTS

Each person whose registration has been completed will be considered a student of the University during the term for which he is registered unless his connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institution, without the specific authorization of the dean or director of the school or college of the University in which he is first registered.

The privileges of the University are not available to any student until he has completed his registration. Since, under the University statutes, payment of fees is a part of registration, no student's registration is complete until his fees have been paid. No student is permitted to attend any University course for which he is not officially registered unless he has been granted auditing privileges. No student may register after the stated period unless he obtains the written consent of the proper director.

ABSENCES

Students are held accountable for absences incurred owing to late enrollment. It is a student's duty to attend punctually each class or laboratory exercise in each course. For credit toward the certificate and degree, regular attendance is required in addition to the proficiency attested by classwork and examination.

Students whose religious duties conflict at any time with academic requirements should apply to the proper director for an equitable solution.

ACADEMIC DISCIPLINE

The continuance of each student upon the rolls of the University, the receipt by him of academic credits, his graduation, and the conferring of any degree or the granting of any certificate are strictly subject to the disciplinary powers of the University, which is free to cancel his registration at any time on any grounds which it deems advisable. The disciplinary authority of the University is vested in the President in such cases as he deems proper, and, subject to the reserved powers of the President, in the dean of each faculty and the director of the work of each administrative board.

WITHDRAWAL

An honorable discharge will always be granted to any student in good academic standing, and not subject to discipline, who may desire to withdraw from the University; but no student under the age of twenty-one years shall be entitled to a discharge without the assent of his parent or guardian furnished in writing to the proper director. Students withdrawing are required to notify the Registrar *in writing* at once.

The director may, for reasons of weight, grant a leave of absence to a student in good standing.

GRADES AND CREDITS

The student's performance in a course is reported according to the following grades: A, excellent; B, good; C, fair; and F, failure. A, B, and C are passing grades counting for credit toward the degree or certificate and accepted as the basis for advancement to a higher course. A student who does not receive a mark of C or above in a prescribed course must repeat that course.

The mark MU is not a grade and simply implies that in the opinion of the instructor the student may be given the privilege of taking a deficiency examination. When this mark is given at the end of the autumn term, it does not necessarily mean that the student may not pursue his courses in the spring term, but that he will get no credit for the course in question until he has received a definite passing grade.

HOUSING

Booklets describing the University residence halls and application blanks for rooms may be obtained (for men) from the Men's Residence Halls Office, 125 Livingston Hall, Columbia University, New York 27, N.Y., or (for women) from the Johnson Hall Office, 411 West 116th Street, New York 27. Rates for the academic year are \$300 to \$450 for men and \$380 to \$525 for women. Optional prepaid board plans are available in the men's residence halls. In Johnson Hall, the residents are required to take breakfast and dinner there at a cost of \$375 for the academic year.

Students who wish to live off campus should write or call at the Registry of Off-Campus Accommodations, 115 Livingston Hall, Columbia University, New York 27, for an information sheet which describes the services rendered by the Registry.

International House, a privately owned student residence near the campus, has accommodations for about five hundred students, both foreign and American. Rates for the academic year are \$350 to \$700. To be eligible for admission a student must be over twenty-one years old and must be registered for at least twelve points or for a program of full-time research. Address the Committee on Admissions, International House, 500 Riverside Drive, New York 27.

SERVICES AND FACILITIES

STUDENT HEALTH SERVICE

A physical examination (including x-ray and tuberculin tests) will be given each student in the professional courses during the first term of attendance. Further physical examinations will be given during the training period, whenever it is deemed advisable.

Students requiring hospitalization will be taken care of either in the wards of the Medical Center, or elsewhere, under a hospitalization insurance policy.

Daily office hours are held for sick students by the Student Health Service, Room 2-220, Vanderbilt Clinic. Members of the Health Service are available to attend ill students if they live near the Medical Center.

EARL HALL

Earl Hall was given to Columbia University by the late William Earl Dodge as a center for the religious and social activities of the students. On the main and lower floors, are the offices of the Chaplain and his staff and of the religious counselors and advisers. There are also an auditorium, a lounge, meeting room, kitchen, and other facilities.

UNIVERSITY LIBRARIES

The physical and occupational therapy collection of reference books, periodicals, and pamphlets is housed in the Medical Library, which occupies parts of the three lower floors in the College of Physicians and Surgeons building. It provides current literature (both books and journals) for faculty and students, and it aids in research through its own collections of current and historical works, through interlibrary loans, and through its unique bibliographic service.

The library contains some two hundred and twenty-eight thousand volumes of books and journals. More than twenty-eight hundred periodicals are received regularly. A professional library staff is available to aid students, faculty, and research workers in the schools of Medicine, Dental and Oral Surgery, Nursing, Public Health and Administrative Medicine, Physical and Occupational Therapy, and in the hospitals of the Medical Center.

The libraries on Morningside Heights, containing about three million volumes, are open to all students of physical and occupational therapy. The main collection is housed in Butler Library, and special and departmental collections are located in various other buildings on the campus. They include collections on biology, education, engineering, psychology, sociology, and other subjects related to physical and occupational therapy and supplement the special collections available in the Medical Library.

Leaflets describing the collections and services of the University Libraries are available in any of the library reading rooms. The Medical Library and all other libraries post the hours.

THE INSTITUTE FOR THE CRIPPLED AND DISABLED

The Institute for the Crippled and Disabled, located at 400 First Avenue, is affiliated with Columbia University and offers broad clinical and educational facilities for the training of physical therapy and occupational therapy students. An outstanding collection of reference books, periodicals, and pamphlets concerning the handicapped, their problems, and their rehabilitation is housed here, available to students in occupational

6 • STUDENT ACTIVITIES

and physical therapy at all times. An occupational therapy teaching unit, established at the Institute, is used for instruction and houses a skills library. Special equipment for the instruction of kinesiology and for the instruction and laboratory practice of massage and exercise is provided for the students.

MEDICAL CENTER BOOKSTORE

The Medical Center Bookstore, located on the second floor of the College of Physicians and Surgeons, is maintained for the convenience of the students and staff of the Medical Center schools and hospitals. The store carries a full stock of textbooks and all other student supplies. Substantial savings are effected whenever the rules of manufacturers and publishers permit. The store is open on weekdays from 8:45 a.m. to 5:30 p.m.

STUDENT ACTIVITIES

The Physical Therapy and Occupational Therapy Clubs are the student organizations in which activities of a recreational, social, and professional nature are carried on. Within these clubs each class of students has its own organization and officers with representatives on the University Student Council.

The Columbia University Student Council, composed of elected representatives from the students of the several schools and faculties of the University, represents the students in matters affecting the student body as a whole, with the object of promoting cooperation and understanding among the students, faculty, and administration.

Students are encouraged to utilize the educational and cultural opportunities offered throughout the University campus and elsewhere in New York City.

Graduates of the physical and occupational therapy programs have alumni associations, which in turn are eligible for group membership in the Alumni Federation of Columbia University.

STUDENT AID

LOAN FUNDS

Long-term loans at low interest rates are available for tuition and fees, and under certain circumstances, for living expenses. Students who need loans for the autumn term should file application with the Bursar, 310 University Hall, by September 1; for the spring term, by December 15.

EMPLOYMENT

A student who needs to earn part of his expenses by working part time during the academic year should get in touch with the Student Employment Office, 405 West 117th Street. In order to help him, the Office requires that he file a short registration card and be interviewed by a staff member. Since employers must know when a student is free to work, *little assistance can be given any student until his class schedule is known.* The Office advises most full-time students to limit their part-time work to fifteen or, at the most, twenty hours a week, although in exceptional circumstances students can sometimes work longer hours without impairing their studies.

The Employment Office places students as tutors, translators, clerks, salesmen, waiters, technical workers, secretaries, typists, and the like. Average rates of pay for

unskilled work are \$1.10 per hour for campus jobs and \$1.25 per hour for off-campus jobs. Higher rates are paid for special skills.

Men students are eligible for work-for-meals jobs in the University dining halls and in the Men's Faculty Club (two hours of work a day in return for three meals). Applications must be filed with the Office by August 1.

Wives of students may also register with the Office for part-time work. Those who are interested in full-time jobs on the campus should apply at the University Personnel Office, Wing C, University Hall Annex; most of these jobs require typing and many require shorthand as well.

Students who wish to work full time during the summer vacation should register with the Student Employment Office early in the spring term.

The Physical and Occupational Therapy Office maintains a listing of positions throughout the country available to graduate therapists. Current graduates and alumni are encouraged to refer to the Office for these positions.

POSTGRADUATE COURSE IN CEREBRAL PALSY

Cerebral Palsy 102 (spring term). Nine weeks, full time. Fees: \$200 plus \$12 University fee. Eight points of academic credit for students with suitable prerequisites. For qualified occupational and physical therapists with working experience. Other ancillary medical personnel may be admitted on an individual basis.

Varied aspects of the problem are presented during three weeks of lectures and demonstrations by approximately thirty instructors. During the next six weeks, four days a week of clinical experience are supplemented by one day of discussion and review guided by the course supervisors. The course endeavors to provide the student with a sound neurological background as a basis for critical thinking.

This course is sponsored by United Cerebral Palsy Associations, Incorporated. A listing of sources for scholarship aid is available. Further information, including dates, and application forms are available from the Office of Postgraduate Courses, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N.Y.

PHYSICAL THERAPY

ADMINISTRATIVE OFFICERS

- GRAYSON KIRK, Ph.D., LL.D. *President of the University*
- JOHN A. KROUT, Ph.D., L.H.D., LL.D. *Vice-President of the University*
- JACQUES BARZUN, Ph.D. *Dean of Faculties and Provost of the University*
- H. HOUSTON MERRITT, M.D. *Acting Vice-President in Charge of Medical Affairs;
Acting Dean of the Faculty of Medicine*
- ROBERT C. DARLING, M.D. . *Professor of Physical Medicine and Rehabilitation; Chairman
of the Department of Physical Medicine and Rehabilitation*
- WILLIAM BENHAM SNOW, M.D. *Professor of Physical Medicine; Medical Director
of Courses in Physical and Occupational Therapy*
- MARY E. CALLAHAN, M.A. *Assistant Professor of Physical Therapy;
Director of Courses in Physical Therapy*
- RUTH DICKINSON, M.A. *Instructor in Physical Therapy; Associate
Director of Courses in Physical Therapy*

OFFICERS OF INSTRUCTION

- MARGUERITE ABBOTT, O.T.R., *Assistant Professor
of Occupational Therapy*; B.S., Tufts; M.A., Columbia; Graduate, Boston School of Occupational Therapy
- GEORGE B. AMBROSE, *Instructor in Orthopedic Surgery*; A.B., M.D., Columbia
- WILLIAM AMOLS, *Associate Professor of Clinical Neurology*; A.B., M.D., New York University
- GUSTAV J. BECK, *Instructor in Medicine*; B.S., Columbia; M.D., New York University
- SIGNE BRUNNSTROM, *Instructor in Physical Therapy*; B.S., Uppsala College, Sweden; M.A., New York University; Physical Therapy, Royal Gymnastic Central Institute, Sweden
- LEE H. CAIRNS, *Instructor in Physical Therapy*; A.B., Smith; Certificate in Physical Therapy, Columbia
- MARY E. CALLAHAN, *Assistant Professor of Physical Therapy*; B.S., New York University; M.A., Columbia; Graduate, Clinton Hospital School of Nursing; Certificate in Physical Therapy, Posse Institute
- MARY A. COVER, *Associate in Physical Therapy*; Graduate, Sargent College; Certificate in Physical Therapy, Walter Reed Hospital
- FREDERICK S. CRAIG, *Assistant Clinical Professor of Orthopedic Surgery*; M.D., Buffalo
- GEORGE F. CRICKELAIR, *Instructor in Surgery*; A.B., M.D., Wisconsin
- ROBERT C. DARLING, *Professor of Physical Medicine and Rehabilitation*; A.B., M.D., Harvard
- RUTH DICKINSON, *Instructor in Physical Therapy*; B.S., Russell Sage; M.A., Certificate in Physical Therapy, Columbia
- HERBERT O. ELFTMAN, *Associate Professor of Anatomy*; A.B., M.A., California; Ph.D., Columbia
- DOROTHY H. ERICSON, O.T.R., *Associate in Occupational Therapy*; B.S. in Occupational Therapy, Kansas
- MARIE LOUISE FRANCISCUS, O.T.R., *Assistant Professor of Occupational Therapy; Director, Courses in Occupational Therapy*; B.S., Ohio State; M.A., Columbia; Graduate, Philadelphia School of Occupational Therapy
- ALFRED GALLINEK, *Associate in Neurology*; M.D., Berlin
- A. DAVID GUREWITSCH, *Associate Clinical Professor of Rehabilitation Medicine*; M.D., Basel
- MORTON HOBERMAN, *Assistant Clinical Professor of Physical Medicine and Rehabilitation*; B.S., New York University; M.B., M.D., Wayne
- WILLIAM A. HORWITZ, *Professor of Clinical Psychiatry*; M.D., Albany Medical College; Sc.D., Med.Sc.D., Columbia
- MARION D. LAIRD, *Instructor in Obstetrics and Gynecology*; B.A., Queens, Ontario; M.D., Toronto
- MILOS J. LOTA, *Associate in Physical Medicine and Rehabilitation*; M.D., Masaryk University

HARRISON L. McLAUGHLIN, *Professor of Clinical Orthopedic Surgery*; M.D., Queens University Medical College

J. LOWRY MILLER, *Associate Clinical Professor of Dermatology*; A.B., North Carolina; M.D., Pennsylvania

CHARLES R. NOBACK, *Associate Professor of Anatomy*; B.S., Cornell; M.S., New York University; Ph.D., Minnesota

MERO R. NOCENTI, *Instructor in Physiology*; A.B., M.S., West Virginia; Ph.D., Rutgers

JOHN F. O'CONNOR, *Instructor in Psychiatry*; B.S., Columbia; M.D., New York State University, College of Medicine

ALEXANDER D. PAPAS, *Instructor in Orthopedic Surgery*; A.B., M.D., Columbia

ISABEL ROBINAULT, O.T.R., *Instructor in Occupational Therapy*; A.B., Barnard; M.A., Certificate in Occupational Therapy, New York University

GEORGE R. ROWLEY, *Instructor in Physiology*; A.B., Upsala; Ph.D., Rutgers

KATHERINE T. SAN JULIAN, *Associate in Physical Therapy*; A.B., New York University; M.A., Certificate in Physical Therapy, Columbia

MARTHA E. SCHNEBLY, O.T.R., *Instructor in Occupational Therapy*; *Associate Director, Courses in Occupational Therapy*; B.S., Maryland State Teachers College, Towson; Certificate in Occupational Therapy, Columbia

DANIEL SCIARRA, *Associate Professor of Clinical Neurology*; A.B., M.D., Harvard

MEYER H. SLATKIN, *Instructor in Dermatology*, B.S., College of the City of New York; M.D., Edinburgh

WILLIAM BENHAM SNOW, *Professor of Physical Medicine*; M.D., Long Island College of Medicine

BLANCHE TALMUD, *Instructor in Physical Therapy*; B.S., Certificate in Physical Therapy, New York University

JOHN A. WOOD, *Assistant in Medicine*; A.B., M.D., Harvard

SHYH-JONG YUE, *Instructor in Physical Medicine and Rehabilitation*; M.D., National College of Medicine, Shanghai

SPECIAL LECTURERS

ARTHUR ABRAMSON, *Chairman, Department of Rehabilitation Medicine, Yeshiva*; B.S., M.D., C.M., McGill

OLAV AUSTLID, *Acting Director, Physical Medicine, Hospital for Special Surgery*; M.D., Vienna

IRMA BARTENIEFF, *Research Assistant to Dr. Gurewitsch*; Certificate in Physical Therapy, New York University

SHIVAJI B. BHONSLAY, *Assistant Attending Surgeon*; M.D., American University, Beirut

ELIZABETH M. CARRICK, *Instructor, New York School of Social Work*; B.S., Ohio State; M.A., New York School of Social Work

THEODORE CORBITT, *Assistant in Physical Therapy, Institute for the Crippled and Disabled*; B.S., Cincinnati; M.A., Certificate in Physical Therapy, New York University

JOHN A. DOWNEY, *Research Associate in Physical Medicine and Rehabilitation*; Presbyterian Hospital; B.Sc., M.D., Manitoba

JON EISENSON, *Lecturer in Otolaryngology*; A.B., College of the City of New York; M.A., Ph.D., Columbia

MINNIE M. GENN, *Pediatric Psychiatric Clinic*; B.S., Boston University; Ed.D., Harvard

CHARLES R. GOLDSTINE, *Director, Prosthetic and Orthopedic Appliance Shops, Institute for the Crippled and Disabled*

MARGERY GROSS, *Chief, Cerebral Palsy Clinic, Institute for the Crippled and Disabled*; A.S., New

Haven Junior College; Certificate in Physical Therapy, Hospital for Special Surgery

EDWARD F. HARTUNG, *Assistant Clinical Professor of Medicine, New York University Post-Graduate Medical School*; A.B., M.D., Columbia

JETTA HENDIN, *Physical Therapist, Columbia-Presbyterian Medical Center*; B.S., Manitoba; M.A., Columbia; Certificate in Physical Therapy, Hospital for Special Surgery

HELEN HENNESSY, *Orthopedic Consultant and Supervisor of Physical Therapy, Visiting Nurse Service of New York*; Graduate, Yale School of Nursing; B.S., Columbia; Certificate in Physical Therapy, Hospital for the Ruptured and Crippled

SHULAMITH KASTEIN, *Speech Pathologist, Department of Otolaryngology, Columbia-Presbyterian Medical Center*; Diploma, Vienna

DAVID R. LYONS, *Psychiatrist*; A.B., M.D., George Washington

JACOB MEISLIN, *Chief, Physical Medicine and Rehabilitation, Franklin Delano Roosevelt Hospital*; B.S., College of the City of New York; M.D., Lausanne

ADAM MUNZ, *Clinical Psychologist, Cerebral Palsy Clinic, Presbyterian Hospital*; A.B., Hunter; M.A., New York University

JUDITH S. SCHACHTER, *Lecturer, Department of Psychiatry*; A.B., Radcliffe; M.D., New York University

JOSEPH E. SNYDER, *Assistant Vice-President, Presbyterian Hospital*; A.B., Nebraska; M.D., Pennsylvania

PHYSICAL THERAPY

Physical therapy is the treatment of disease and injury by the use of such agents as sunshine, water, exercise, massage, mechanical forces, and electricity. Functional rehabilitation of persons injured by disease or accident is a pressing medical need; the skillful application of physical therapy following injury will do much to shorten the time of disability. The ultimate aim of any treatment is the maximal rehabilitation and adjustment of the patient. The success of this type of treatment is dependent upon the therapist's knowledge, care, and precision in the administration of the intelligent medical prescription.

The program of study described here gives the student a basic knowledge of the normal functions of the human body and of the pathology of those diseases and injuries in which physical therapy can be helpful in the optimum rehabilitation of the patient. In addition to theoretical classroom instruction and demonstrations, students observe treatment procedures and receive practice in teaching hospitals under University supervision.

The curriculum is planned to serve the educational needs of students working toward the Bachelor of Science degree or toward the Certificate of Training in Physical Therapy.

The Bachelor of Science degree is offered upon satisfactory completion of the full junior and senior program, which includes clinical experience. This program is superimposed upon two years of college work in liberal arts with a minimum of sixty semester credits including the proper science prerequisites.

The Certificate of Training in Physical Therapy is offered upon satisfactory completion of the programs (academic and clinical) prescribed for students of advanced standing. This program is superimposed upon the background of one of the following:

1. Bachelor's degree from an accredited college or university
2. Graduation from a nationally accredited professional school of nursing

Graduates of either program will have had a minimum of four years' post-secondary education study including special professional courses in physical therapy. Minimum standards for approved schools of physical therapy are set by the American Medical Association through the Council on Medical Education and Hospitals. Graduates of either program are eligible for admission to the examination of the American Registry of Physical Therapists and for membership in the American Physical Therapy Association.

Many states require licensing or registration of physical therapists, for which examinations are usually held at intervals during the year. A student should become familiar with the requirements in his state so that any required examination may be taken as soon as possible after graduation.

The law in New York State requires that a graduate must pass the qualifying examination, conducted by the Department of Education of the State of New York. This examination is usually held in July and December of each year. According to the law in New York State only those persons who are citizens or who have filed intentions of becoming citizens of this country may be considered for admission to the examination.

ADMISSION REQUIREMENTS

Students are admitted only in September. Admission to the professional courses is open to qualified students from nineteen to thirty-five years of age. In subjects taken at other institutions for which transfer credit is allowed, a grade of C or better is required. The ability to swim is required for both programs of study in the second term. Students

unable to swim at the time of admission are responsible for securing instruction for themselves before the second term. Applicants for admission must be graduates of approved high schools or the equivalent, and then must satisfy *one* of the following requirements:

For the degree program:

The completion of at least sixty semester credits (two years) of liberal arts courses in a college approved by Columbia University. Courses must include: (a) 6 semester credits in biology; (b) 4 semester credits in chemistry or physics (preferably both); (c) 6 semester credits in English; and (d) 6 semester credits in psychology.* Elective courses in foreign languages, literature, humanities, social sciences, natural sciences are recommended. Students who present evidence of a balanced education are preferred.

For the certificate program:

Graduation from an approved college with at least a Bachelor of Science or Bachelor of Arts degree, the undergraduate work to include: (a) 8 semester credits in biological science; (b) 6 semester credits in physics or chemistry (preferably both); (c) 10 semester credits in social science (of which 6 must be in psychology)

Or

Graduation from a nationally accredited professional school of nursing with courses carrying college credit in the biological and physical sciences. Courses in the humanities and social sciences are a desirable background.

ADMISSION PROCEDURE

Application forms may be obtained by writing to the Physical Therapy Office, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N.Y., and should be filed by June 1 preceding the academic year in which the student wishes to begin his studies. The completed form must be accompanied by the application fee of \$10. This fee is not returnable and is not credited toward tuition.

Transcripts of all post-secondary education should be forwarded by the registrar of the respective schools directly to the Director of Courses in Physical Therapy.

A personal interview will be arranged for each applicant.

ESTIMATED EXPENSES

<i>University Expenses (total program)</i>	<i>Degree Program (two years)</i>	<i>Certificate Program (one year)</i>
Tuition	\$2,200	\$1,100
University fees	96	48
Clinical supervisory fee	24	12
Books, materials, equipment, uniforms	115	100
Health and hospital fee	60	30
<i>Total</i>	<u>\$2,495</u>	<u>\$1,290</u>

* Requirements for admission to the licensure examination for physical therapists in the state of New York include 6 semester credits in biology, 6 in chemistry, and 6 in physics. Three of the required credits in physics will be earned during the study of physical therapy at Columbia. Students who plan to practice in New York State should accordingly fulfill the remainder of these requirements before coming to Columbia.

<i>Living Expenses (per academic year)</i>	
Room	\$340–\$485
Board	550
Subway and bus fares (within program)	65
<i>Total</i>	<u>\$955–\$1,100</u>

During summer clinical practice periods, the amount of living expenses will vary depending upon the accommodations provided by the medical institution to which the student is assigned.

PROGRAM OF STUDY

Degree candidates take the entire program of courses listed below. Certificate candidates take only the starred courses. Both curricula are outlined on pages 16-17.

Degree candidates should consult the bulletins of Teachers College and the School of General Studies for suitable electives.

The University reserves the right to withdraw or modify these courses or to change the instructors as may be necessary.

Junior Year: Autumn Term

***Anatomy 155—Human anatomy.** Lectures and laboratory. 3 pts. Professors Elftman and Noback.

Anatomy of the human body with emphasis on those features which are most important for muscular activity. Instruction is given by means of lectures and laboratory work, the latter being based on prepared dissection of the human body.

***Kinesiology 105—Applied anatomy and kinesiology.** Lectures and laboratory. 2 pts. Misses Brunnstrom, Dickinson, Schnebly, and others.

Application of knowledge of gross anatomy of skeletal and muscular systems to mechanics of bodily movement. Analysis of skills used in daily activities and other activities in physical and occupational therapy.

***Massage 3—Essentials of massage and techniques of relaxation.** Lectures and laboratory. 2 pts. Professors Callahan and Gurewitsch; Mrs. Bartenieff and Miss Cairns.

The theory and technique of massage and relaxation with demonstration and practice.

***Nursing Procedures 17—Bandaging and dressings.** Lectures and laboratory. 1 pt. Miss Cairns.

The techniques of bandaging, asepsis, handling of dressings, and bedside conduct.

***Orientation 39—Professional ethics and institutional organization.** 1 pt. Professor Snow.

Lectures governing appropriate conduct of medical assistants in the routine of their work. Orientation of medical workers toward institutional contacts.

***Physics 111—Physics applied to physical medicine.** Lectures and demonstrations. 3 pts. Dr. Lota.

Basic kinetics, radiation, hydro-dynamics, and electricity as they apply to the practice of physical therapy.

***Physiology 55 or 157—Human physiology.** Lectures and demonstrations. 2 pts. Drs. Nocenti (55) and Rowley (157).

A comprehensive discussion of the major organ systems of the human body and their functions, with emphasis on the physiology of exercise. Students with a minimum background of course work in biology, chemistry, and physics register for *Physiology 55*. Those who have had a comprehensive physiology course and considerable course work in biology, chemistry, and physics register for *Physiology 157*.

Psychology 41—Child development. 2 pts. Dr. Lyons.

The mental, motor, social, and emotional development of the child. Special attention is given to a consideration of stress situations encountered by the child and his methods of handling them.

Junior Year: Spring Term

Clinical Experience 2—Introduction to clinical practice. 2 pts.

Orientation to institutions, physical therapy departments, patients, keeping records, and in giving massage and exercise.

14 • PHYSICAL THERAPY

***Exercise 112—Therapeutic exercise, including underwater techniques.** Lectures and laboratory. 2 or 4 pts. Professors Snow, Darling, Hoberman, and associates.

The basic principles of therapeutic exercise, including physiology of exercise, muscle evaluation and re-education, tests and measurements, and underwater exercises.

***Hydrotherapy 18—Theory and practice, including neuropsychiatric techniques.** Lectures and laboratory. 1 pt. Dr. Downey and Mrs. San Julian.

The physiological effects of water as a therapeutic agent; hydrotherapeutic techniques and other applications.

***Orthopedics 136—Orthopedics.** 2 pts. Drs. Craig and Papas.

Lectures and clinical presentations descriptive of orthopedic conditions, including discussion of related problems—social, medical, surgical, and rehabilitation.

***Psychiatry 102—Elementary psychiatry.** 3 pts. Dr. O'Connor, Mr. Munz, and others.

Etiology and symptomatology of the major and minor psychoses, including the psychoneuroses and their treatment. Lectures with clinical demonstrations and field trips.

Work for the third point includes a survey of psychological tests and measurements and interpretation of their results for the physical and occupational therapist.

***Thermotherapy 10—Heat application and radiation.** 1 pt. Dr. Downey and Mrs. San Julian.

A study of spectral radiation and the theory and technique of application of radiation of various types.

Elective chosen with the approval of the adviser. 2 pts.

Summer

Degree candidates spend ten weeks (June, July, and part of September) in full-time clinical practice at one or more of the affiliated hospitals (see pages 18–20). They attend lectures, clinics, and staff meetings, receive supervised practical experience in physical therapy, and are introduced to related treatment departments.

Certificate candidates have a similar experience for four months (June, July, August, and September).

Senior Year: Autumn Term

Clinical Experience 3—Supervised clinical practice. 2 pts.

Lectures, observation, demonstrations, and supervised practice in various clinics of physical medicine and rehabilitation.

***Clinical subjects 101—General medicine and surgery.** 2 pts. Drs. Bhonslay and Wood.

General medicine (Dr. Wood): A survey of the more common diseases with emphasis on pulmonary tuberculosis and cardiac disorders. Lectures deal primarily with the relationship of pathological physiology to the development of signs and symptoms of disease.

General surgery (Dr. Bhonslay): A survey of those common diseases for which there is surgical emphasis.

***Neuroanatomy 95—Anatomy of the nervous system.** 2 pts. Professor Sciarra.

Anatomy of the nervous system of man, including the structural unit, the cerebrospinal system, and the autonomic system. Attention will be given to the gross divisions of the brain, spinal cord, and peripheral nerves, with particular emphasis on the controls affecting voluntary motion.

Orientation 41—Seminar on social work and human behavior. 1 pt. Mrs. Carrick.

Orientation to social work as related to what we learn about human behavior and its relationship to physical therapy.

***Pathology 31—Elementary studies in pathology.** 1 pt. Instructor to be announced.

Lectures to outline the basic alterations which occur in body tissues due to injury and disease; alterations of function resulting from these influences.

Psychiatry 101—Psychosomatic aspects of physical medicine. 1 pt. Dr. Schachter.

A consideration of the emotional aspects of all disease.

Speech 163—Principles and practice of speech science. 2 pts. Dr. Eisenson.

This course covers the basic anatomy and physiology underlying speech science. Consideration will be given to the pathology of speech abnormalities and the therapeutic approach to their correction.

Elective in English, communication skills, or public speaking and discussion. 3 pts.

Elective chosen with the approval of the adviser. 2 pts.

Senior Year: Spring Term

***Clinical Applications 130—Survey of medical and surgical conditions in relation to physical medicine.** Lectures and demonstrations. 2 pts. Professor Snow and associates.

This course gives the student a closer acquaintance with disease as it occurs in the practice of physical medicine. Specialists discuss the problems in their fields of practice, including particular pathology and the needs of physical medicine. This analysis is followed by prescriptive physical therapy to cover these special indications. There will be further clinical practice in hospitals.

Clinical Experience 4—Supervised clinical experience. 2 pts.

Continuation of *Clinical Experience 3*.

***Electrotherapy 14—Theory and practice of electrotherapy.** 2 pts. Dr. Lota and associates.

Theory and principles of technique of the diagnostic and therapeutic uses of high frequency, galvanic, and other low frequency currents.

Kinesiology 205—Advanced kinesiology. 2 pts. Miss Brunnstrom and others.

Review of recent scientific developments applicable to movement therapy.

Registration only with the instructor's permission.

***Neurology 106—Clinical neurology.** 2 pts. Dr. Gallinek.

Etiology, symptomatology, and treatment in diseases of the brain, spinal cord, and peripheral nerves.

***Orientation 16—Seminar.** 1 or 2 pts. Professor Callahan and Misses Dickinson and Schnebly.

Lecture and discussion of topics of importance to the therapist in practice, including organization and administration in departments of physical therapy; job placement and recent developments in physical medicine. Seniors will register for two points which will include a general survey of occupational therapy, with emphasis on theoretical principles as applied to major disability areas.

Physical Therapy 116—Practical application of physical therapy. 2 pts. Professor Snow and associates.

Integration and application of the fundamental principles and skills already learned to specific cases.

***Rehabilitation 150—Rehabilitation techniques and problems of the handicapped.** Lectures and demonstrations. 2 pts. Miss Talmud.

Theory, practice, and evaluation of functional activities; types, application, and care of supportive apparatus.

Elective chosen with the approval of the adviser. 2 pts.

OUTLINE OF THE PROGRAMS

DEGREE PROGRAM

Junior Year: Autumn Term

<i>Anatomy</i> 155	Human anatomy	3
<i>Kinesiology</i> 105	Applied anatomy and kinesiology	2
<i>Massage</i> 3	Essentials of massage and techniques of relaxation	2
<i>Nursing Procedures</i> 17	Simple bandaging, dressings, asepsis and other techniques	1
<i>Orientation</i> 39	Professional ethics and institutional organization	1
<i>Physics</i> 111	Physics applied to physical medicine	3
<i>Physiology</i> 55 or 157	Aspects of human physiology	2
<i>Psychology</i> 41	Child development	2
		<hr/>
		<i>Total points</i> 16

Junior Year: Spring Term

<i>Clinical Experience</i> 2	Introduction to clinical practice	2
<i>Exercise</i> 112	Therapeutic exercise, including underwater techniques	4
<i>Hydrotherapy</i> 18	Theory and practice, including neuropsychiatric techniques	1
<i>Orthopedics</i> 136	Survey of orthopedics	2
<i>Psychiatry</i> 102	Elementary psychiatry	3
<i>Thermotherapy</i> 10	Heat application and radiation	1
	Elective chosen with the approval of the adviser	2
		<hr/>
		<i>Total points</i> 15

June, July, and September: Clinical observation, instruction, and supervised practice

Senior Year: Autumn Term

<i>Clinical Experience</i> 3	Supervised clinical practice	2
<i>Clinical Subjects</i> 101	General medicine and surgery	2
<i>Neuroanatomy</i> 95	Anatomy of the nervous system	2
<i>Orientation</i> 41	Seminar on social work and human behavior	1
<i>Pathology</i> 31	Elementary studies in pathology	1
<i>Psychiatry</i> 101	Psychosomatic aspects of physical medicine	1
<i>Speech</i> 163	Principles and practice of speech science	2
	Elective in English, communication skills, or public speaking and discussion	3
	Elective chosen with the approval of the adviser	2
		<hr/>
		<i>Total points</i> 16

Senior Year: Spring Term

<i>Kinesiology 205</i>	Advanced kinesiology	2
<i>Clinical Applications 130</i>	Survey of medical and surgical conditions in relation to physical medicine	2
<i>Clinical Experience 4</i>	Supervised clinical practice (continued)	2
<i>Electrotherapy 14</i>	Theory and practice of electrotherapy	2
<i>Neurology 106</i>	Clinical neurology	2
<i>Orientation 16</i>	Seminar	2
<i>Physical Therapy 116</i>	Practical application of physical therapy	2
<i>Rehabilitation 150</i>	Rehabilitation techniques and problems of the handicapped	2
	Elective chosen with the approval of the adviser	2

Total points 18

CERTIFICATE PROGRAM

Autumn Term

<i>Anatomy 155</i>	Human anatomy	3
<i>Clinical Subjects 101</i>	General medicine and surgery	2
<i>Kinesiology 105</i>	Applied anatomy and kinesiology	2
<i>Massage 3</i>	Essentials of massage and techniques of relaxation	2
<i>Neuroanatomy 95</i>	Anatomy of the nervous system	2
<i>Nursing Procedures 17</i>	Simple bandaging, dressings, asepsis, and other techniques	1
<i>Orientation 39</i>	Professional ethics and institutional organization	1
<i>Pathology 31</i>	Elementary studies in pathology	1
<i>Physics 111</i>	Physics applied to physical medicine	3
<i>Physiology 55 or 157</i>	Human physiology	2

Total points 19

Spring Term

<i>Clinical Applications 130</i>	Survey of medical and surgical conditions in relation to physical medicine	2
<i>Electrotherapy 14</i>	Theory and practice of electrotherapy	2
<i>Exercise 112</i>	Therapeutic exercise, including underwater techniques	4
<i>Hydrotherapy 18</i>	Theory and practice, including neuropsychiatric techniques	1
<i>Neurology 106</i>	Clinical neurology	2
<i>Orientation 16</i>	Seminar	1
<i>Orthopedics 136</i>	Survey of orthopedics	2
<i>Psychiatry 102</i>	Elementary psychiatry	2
<i>Rehabilitation 150</i>	Rehabilitation techniques and problems of the handicapped	2
<i>Thermotherapy 10</i>	Heat application and radiation	1

Total points 19

June, July, August, and September: Clinical instruction and supervised experience

HOSPITALS AFFILIATED FOR CLINICAL PRACTICE

Attendance in the hospitals and clinics listed below is concurrent with regular classroom work in the autumn and spring terms. In addition, all students are required to spend a period during the summer in full-time clinical practice. During this period students attend lectures, clinics, and staff meetings, receive supervised practical experience in physical therapy, and are introduced to related treatment departments.

BLYTHEDALE, Valhalla, N.Y.

W. H. Kelley, *Executive Director*
A. David Gurewitsch, M.D., *Medical Director*
Carroll Wardlaw, *Head Physical Therapist*

BURKE FOUNDATION CONVALESCENT HOME, White Plains, N.Y.

George Brush, *Superintendent*
Edward J. Lorenze, M.D., *Medical Director*
Anthony De Rosa, *Chief Physical Therapist*

COLUMBIA-PREBYTERIAN MEDICAL CENTER HOSPITALS, New York, N.Y.

Alvin J. Binkert, *Executive Vice-President and General Manager*
William Benham Snow, M.D., *Director, Clinical Physical Medicine*
Mary A. Cover, *Chief Physical Therapist*

HARTFORD REHABILITATION CENTER, Hartford, Conn.

Edward Scull, M.D., *Supervising Medical Consultant*
Anne Fayan, *Supervisor, Physical Therapy, Hospital Services*
Lena Wulf, *Supervisor, Education and Physical Therapy, Home Services*

HOSPITAL FOR CHRONIC ILLNESS, Rocky Hill, Conn.

Wladimir T. Liberson, M.D., *Chief, Physical Medicine and Rehabilitation*
Herbert Jones, *Supervisor of Physical Therapy*

INSTITUTE FOR THE CRIPPLED AND DISABLED, New York, N.Y.

Willis C. Gorthy, *Director*
John Untereker, M.D., *Director of Medical Services*
Blanche Talmud, *Supervising Therapist*

INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION, New York University-Bellevue Medical Center, New York, N.Y.

Howard Rusk, M.D., *Director*
Donald A. Covalt, M.D., *Clinical Director*
Jack M. Hofkosh, *Supervisor, Physical Therapy Department*

JEWISH CHRONIC DISEASE HOSPITAL, Brooklyn, N.Y.

Joseph B. Rogoff, *Director, Physical Medicine and Rehabilitation*
Murray Chrystal, *Administrative Assistant and Chief Physical Therapist*

KESSLER INSTITUTE FOR REHABILITATION, West Orange, N.J.

William K. Page, Jr., *Administrator*
Henry H. Kessler, M.D., *Medical Director*
Robert Mears, *Director of Physical Therapy*

MARINE HOSPITAL, UNITED STATES PUBLIC HEALTH SERVICE, New York, N.Y.

Alfred J. Rucci, M.D., *Chief of Surgery*
Nellie Evans, *Chief Physical Therapist*

MIDDLESEX REHABILITATION AND POLIO HOSPITAL, North Brunswick, N.J.

Maurice Dorsen, Ph.D., *Administrator*
Norman Reitman, M.D., *Chief of Medical Staff*
Michael R. Sofranko, *Chief Physical Therapist*

NEW YORK HOSPITAL, New York, N.Y.

Kenneth Archibald, M.D., *Director of Physical Medicine*
Margaret Valentine Rennison, *Supervisor of Physical Therapy*

NEW YORK STATE REHABILITATION HOSPITAL, West Haverstraw, N.Y.

Seymour Bluestone, M.D., *Director*
Morton Hoberman, M.D., *Chief, Rehabilitation Services and Research*
Margaret A. O'Neill, *Director, Department of Physical Therapy*

P.S. #85, Bronx, N.Y.

William Benham Snow, M.D., *Medical Director*
Jessie Armolino, *Teacher Coordinator*
Nancy DuBois, *Clinical Coordinator*

ROOSEVELT HOSPITAL, New York, N.Y.

John Untereker, M.D., *Medical Director*
Cora Alice Taylor, *Chief Physical Therapist*

ST. BARNABAS HOSPITAL FOR CHRONIC DISEASES, Bronx, N.Y.

A.P. Merrill, M.D., M.H.A., *Superintendent*
Robert A. Muller, M.D., *Director, Department of Physical Medicine and Rehabilitation*
Manfred E. Lange, *Chief Physical Therapist*

VETERANS ADMINISTRATION HOSPITAL, Bronx, N.Y.

Alfred Ebel, M.D., *Chief, Physical Medicine and Rehabilitation Service*
Morris Vogel, *Chief of Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, Brooklyn, N.Y.

Milton Holtzman, M.D., *Chief, Physical Medicine and Rehabilitation*
Theodore F. Childs, *Chief of Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, Manhattan, N.Y.

William J. Dann, *Manager*
Bernard Stoll, M.D., *Chief, Physical Medicine and Rehabilitation Service*
Owen Testor, *Chief, Physical Therapy*

VETERANS ADMINISTRATION HOSPITAL, Montrose, N.Y.

Leon Rackow, M.D., *Manager*
Jack Meislin, M.D., *Chief, Physical Medicine and Rehabilitation Service*
Henry Stano, *Chief, Physical Therapy*

VETERANS ADMINISTRATION, NEW YORK REGIONAL OFFICE, RAY CLINICS, New York, N.Y.

Irving Tepperberg, M.D., *Chief, Physical Medicine Rehabilitation Service*

Elmer Marjay, M.D., *Chief, Physical Medicine Group*

G. DiNubila, *Chief Physical Therapist*

VISITING NURSE SERVICE OF NEW YORK, N.Y.

Mary McCall Tyrie, *Director of Education*

Helen Hennessy, *Orthopedic Consultant; Supervisor of Physical Therapy*

OCCUPATIONAL THERAPY

ADMINISTRATIVE OFFICERS

- GRAYSON KIRK, Ph.D., LL.D. *President of the University*
- JOHN A. KROUT, Ph.D., L.H.D., LL.D. *Vice-President of the University*
- JACQUES BARZUN, Ph.D. *Dean of Faculties and Provost of the University*
- H. HOUSTON MERRITT, M.D. *Acting Vice-President in Charge of
Medical Affairs; Acting Dean of the Faculty of Medicine*
- ROBERT C. DARLING, M.D. *Professor of Physical Medicine and Rehabilitation;
Chairman of the Department of Physical Medicine and Rehabilitation*
- WILLIAM BENHAM SNOW, M.D. *Professor of Physical Medicine; Medical Director
of Courses in Physical and Occupational Therapy*
- MARIE LOUISE FRANCISCUS, M.A. *Assistant Professor of Occupational Therapy;
Director of Courses in Occupational Therapy*
- MARTHA E. SCHNEBLY, B.S. *Instructor in Occupational Therapy;
Associate Director of Courses in Occupational Therapy*

OFFICERS OF INSTRUCTION

- MARGUERITE ABBOTT, O.T.R., *Assistant Professor of Occupational Therapy*; B.S., Tufts; M.A., Columbia; Graduate, Boston School of Occupational Therapy
- MICHAEL ANTELL, *Adjunct Assistant Professor of Public Health Practice*; M.D., Long Island College of Medicine; M.P.H., Harvard
- ELEANOR BOWEN BERRY, O.T.R., *Assistant in Occupational Therapy*; A.B., Hiram; Certificate in Occupational Therapy, Columbia
- SIGNE BRUNNSTROM, *Instructor in Physical Therapy*; B.S., Uppsala College, Sweden; M.A., New York University; Physical Therapy, Royal Gymnastic Central Institute, Sweden
- LEE H. CAIRNS, *Instructor in Physical Therapy*; A.B., Smith; Certificate in Physical Therapy, Columbia
- MARY E. CALLAHAN, *Assistant Professor of Physical Therapy; Director, Courses in Physical Therapy*; B.S., New York University; M.A., Columbia; Graduate, Clinton Hospital School of Nursing; Certificate in Physical Therapy, Posse Institute
- GRAHAM CLARK, *Associate in Ophthalmology*; B.S., M.D., Virginia
- FREDERICK S. CRAIG, *Assistant Clinical Professor of Orthopedic Surgery*; M.D., Buffalo
- ROBERT C. DARLING, *Professor of Physical Medicine and Rehabilitation*; A.B., M.D., Harvard
- RUTH DICKINSON, *Instructor in Physical Therapy; Associate Director, Courses in Physical Therapy*; B.S., Russell Sage; M.A., Certificate in Physical Therapy, Columbia
- HERBERT O. ELFTMAN, *Associate Professor of Anatomy*; A.B., M.A., California; Ph.D., Columbia
- DOROTHY H. ERICSON, O.T.R., *Associate in Occupational Therapy*; B.S. in Occupational Therapy, Kansas
- MARIE LOUISE FRANCISCUS, O.T.R., *Assistant Professor of Occupational Therapy*; B.S., Ohio State; M.A., Columbia; Graduate, Philadelphia School of Occupational Therapy
- EDWARD J. FREY, *Lecturer in Graphic Arts, School of General Studies*
- ALFRED GALLINEK, *Associate in Neurology*; M.D., Berlin
- LESTER GELB, *Instructor in Psychiatry; Director, Mental Hygiene Clinic and Social Adjustment Service, Institute for the Crippled and Disabled*; A.B., New York University; M.D., Long Island College of Medicine
- MORTON HOBERMAN, *Assistant Clinical Professor of Physical Medicine and Rehabilitation*; B.S., New York University; M.B., M.D., Wayne
- ELEANOR C. KILLE, O.T.R., *Assistant in Occupational Therapy*; Graduate, Philadelphia School of Occupational Therapy

22 • OCCUPATIONAL THERAPY

- PAUL LINDENBERG, *Instructor in Otolaryngology*; M.D., Vienna
- YASHA LISENCO, *Instructor in Fine and Industrial Arts, Teachers College*; B.S., College of the City of New York; M.A., Columbia
- MELVIN LOOS, *Adjunct Professor of Graphic Arts, School of General Studies*; Manager, Printing Office, Columbia University Press
- WILLIAM J. MAHONEY, *Assistant Professor of Fine and Industrial Arts, Teachers College*; B.S., M.A., Ed.D., Columbia
- CHARLES R. NOBACK, *Associate Professor of Anatomy*; B.S., Cornell; M.S., New York University; Ph.D., Minnesota
- MERO R. NOCENTI, *Instructor in Physiology*; A.B., M.S., West Virginia; Ph.D., Rutgers
- JOHN F. O'CONNOR, *Instructor in Psychiatry*; B.S., Columbia; M.D., New York University, College of Medicine
- ALEXANDER D. PAPAS, *Instructor in Orthopedic Surgery*; A.B., M.D., Columbia
- ISABEL ROBINAULT, O.T.R., *Instructor in Occupational Therapy*; A.B., Barnard; M.A., Certificate in Occupational Therapy, New York University
- GEORGE R. ROWLEY, *Instructor in Physiology*; A.B., Upsala; Ph.D., Rutgers
- MARTHA E. SCHNEBLY, O.T.R., *Instructor in Occupational Therapy*; B.S., Maryland State Teachers College, Towson; Certificate in Occupational Therapy, Columbia
- DANIEL SCIARRA, *Associate Professor of Clinical Neurology*; A.B., M.D., Harvard
- ELIZABETH A. SCULLY, O.T.R., *Instructor in Occupational Therapy*; A.B., Smith; Certificate, Boston School of Occupational Therapy
- WILLIAM BENHAM SNOW, *Professor of Physical Medicine*; M.D., Long Island College of Medicine
- BLANCHE TALMUD, *Instructor in Physical Therapy*; B.S., Certificate in Physical Therapy, New York University
- ALICE R. TREI, O.T.R., *Instructor in Occupational Therapy*; B.S., New York University; Certificate in Occupational Therapy, Columbia
- THELMA L. WELLERSON, O.T.R., *Instructor in Occupational Therapy*; B.S. in Occupational Therapy, M.A., Columbia
- JOHN A. WOOD, *Assistant in Medicine*; A.B., M.D., Harvard

SPECIAL LECTURERS

- SOPHIA R. ACKERMAN, O.T.R., *Chief, Occupational Therapy, New York Veterans Administration Hospital*; B.S., Certificate in Occupational Therapy, New York University; M.A., Columbia
- NORMA A. ALESSANDRINI, O.T.R., *Director, Children's Recreation Service, Bellevue Hospital*; B.S., Cornell; Certificate in Occupational Therapy, Columbia
- LOTTIE I. BARTH, O.T.R., *Director of Occupational Therapy, Montefiore Hospital*; B.S., Certificate in Occupational Therapy; New York University
- SHIVAJI B. BHONSLAY, *Assistant Attending Surgeon*; M.D., American University, Beirut
- EDITH H. BROKAW, O.T.R., *Consultant in Occupational Therapy*; Graduate, Philadelphia School of Occupational Therapy
- HAROLD CHENVEN, *Chief Clinical Psychologist, Institute for the Crippled and Disabled*; A.B., Brooklyn; M.A., Ph.D., New York University
- CECILE L. CROTTY, *Recreation Instructor, New York State Psychiatric Institute*; Diploma, Posenissen College of Physical Education
- MARJORIE FISH, O.T.R., *Executive Director, American Occupational Therapy Association*; A.B., Swarthmore; M.A., Columbia; Graduate, Boston School of Occupational Therapy
- CLAIRE S. GLASSER, O.T.R., *Instructor in Occupational Therapy, New York University*; B.S. in Occupational Therapy, Columbia
- CHARLES GOLDSTINE, *Director, Prosthetic and Orthopedic Appliance Shop, Institute for the Crippled and Disabled*
- WILLIS C. GORTHY, *Director, Institute for the Crippled and Disabled*; C.E., Cornell
- JACK GRANOFFSKY, *Associate Chief, Psychological and Vocational Services, Institute of Physical Medicine and Rehabilitation*; A.B., Brooklyn; M.A., New York University; Ph.D., Yeshiva
- MARGERY GROSS, *Chief, Cerebral Palsy Clinic, Institute for the Crippled and Disabled*; A.S., New Haven Junior College; Certificate in Physical Therapy, Hospital for Special Surgery
- MARGARETTE N. HELMLE, *Director, Rehabilitation Service, Brooklyn Tuberculosis and Health Association*
- SHULAMITH KASTEIN, *Speech Pathologist, Department of Otolaryngology, Columbia-Presbyterian Medical Center*; Diploma, Vienna
- VIRGINIA KILBURN, O.T.R., *Director of Education, American Occupational Therapy Association*; A.B., Wellesley; M.A., Certificate in Occupational Therapy, Columbia
- DAVID R. LYONS, *Psychiatrist*; A.B., M.D., George Washington
- ADAM MUNZ, *Clinical Psychiatrist, Cerebral Palsy Clinic, Presbyterian Hospital*; A.B., Hunter; M.A., New York University

AGNES D. NESS, O.T.R., *Teacher, Vocational Department, Lexington School for the Deaf*; B.S., Certificate in Occupational Therapy, New York University; M.A., Columbia

JAY O'BRIEN, *Director, Vocational Evaluation and Guidance Unit, Institute for the Crippled and Disabled*; B.S., Ohio State

JANET PINNER, *Director of Selective Placement Service, New York State Employment Service*; A.B., Adelphi

MORTON A. SEIDENFELD, *Director of Psychological Services and Public Education, National Foundation*; B.S., Washington; M.S., Ph.D., Pennsylvania

MILDRED A. SPARGO, O.T.R., *Director, Occupational Therapy, Payne Whitney Psychiatric Clinic*

of New York Hospital; Graduate, Boston School of Occupational Therapy

EMIL TRAPANI, *Director, Industrial Rehabilitation Service, Institute for the Crippled and Disabled*

SOL WARREN, *State Coordinator of Internship Training, Division of Vocational Rehabilitation, New York State Department of Education*; B.S., Brooklyn; M.A., Columbia; Ph.D., New York University

OLIVE WEINBACH, O.T.R., *Supervisor of Occupational Therapy, Bellevue Hospital*; Graduate, Philadelphia School of Occupational Therapy

MICHI YASUMURA, O.T.R., *Director, Pediatric Occupational Therapy, New York Hospital*; A.B., Washington; M.A., Certificate in Occupational Therapy, New York University

OCCUPATIONAL THERAPY

Occupational therapy is the administration of medically prescribed treatment in the form of supervised activity for persons injured in body or mind by accident or disease. Creative and manual arts, recreational activities, educational pursuits, prevocational exploration and the activities of daily living are used in occupational therapy programs to improve physical function and to promote mental, social, and economic adjustment of the patient. Occupational therapy plays an integral part in modern rehabilitation programs for the mentally or physically ill.

Two courses of study are offered: one of twenty-five months' duration leading to the Bachelor of Science degree, and one of seventeen months' duration leading to a certificate. See "Admission Requirements" below.

The curriculum consists of classroom work devoted to courses in the biological, social, and clinical sciences providing a scientific, medical, and theoretical background. At the same time instruction is given in the techniques of creative and manual arts, activities of daily living, recreational, educational, and prevocational activities as they enter into the actual practice of occupational therapy. Correlated with theoretical classroom instruction, students observe treatment procedures in the occupational therapy units of several hospitals and institutions of the metropolitan area. A program of student clerkships in conjunction with the same institutions permits students to study treatment problems of specific diagnostic classifications as they are introduced in the medical lecture series, by means of the case study and laboratory method. In addition, there is a nine-month period of clinical practice in teaching hospitals under the supervision of the University.

The courses described in this bulletin meet the requirements set forth by the American Occupational Therapy Association and by the Council on Medical Education and Hospitals of the American Medical Association, as published in their *Essentials of an Acceptable School of Occupational Therapy*, which regulates the standards by which schools are accredited. Graduates of both the degree course and the certificate course are eligible for the examination leading to admission to the Registry of Occupational Therapists maintained by the American Occupational Therapy Association. This examination is held throughout the country in January and June of each year. Admission to the registry is the certification of a therapist to practice.

ADMISSION REQUIREMENTS

Students will be admitted in September only. Applicants for admission must be between the ages of nineteen and thirty-five years. Both men and women are admitted to professional courses, depending upon individual qualifications. Demands made on the physical endurance and emotional stamina of the therapist require a record of good health. Applicants must be graduates of an approved high school or the equivalent, and must satisfy one of the following requirements:

A. *Candidates for the Degree.* Students who have satisfactorily completed at least two years of work in a college approved by Columbia University may register for the degree course, to be completed in approximately two years—sixteen months of theoretical education and nine months of clinical practice. Specific admission requirements include:

- I. Sixty semester credits in liberal arts, including a minimum of:
 - a. Six semester credits in biology (including coverage in zoology), chemistry, or physics.

- b. Three semester credits in psychology.
- c. Three semester credits in sociology.
- 2. A grade of C or better is required to receive transfer credit.

NOTE:—Suggested preprofessional curriculum is given on page 26.

B. *Candidates for the Certificate.* Students who hold a baccalaureate degree acceptable to Columbia University may register in the certificate course, to be completed in approximately seventeen months—eight months of theoretical education and nine months of clinical practice. Specific admission requirements include:

- 1. A Bachelor's degree. (See note below.)
- 2. Courses completed for the above degree should include the following minima:
 - a. Six semester credits in biology (including coverage in zoology), chemistry, or physics.
 - b. Six semester credits in psychology.
 - c. Three semester credits in sociology.

NOTE:—Graduates with accredited professional education in fields closely related to occupational therapy may be admitted to the certificate program.

ADMISSION PROCEDURE

Forms to be used in making application for admission may be obtained by writing to the Occupational Therapy Office, College of Physicians and Surgeons, 630 West 168th Street, New York 32, N.Y. Applications should be filed several months in advance of the time at which students wish to begin their studies. The completed form must be accompanied by the application fee of \$10. This fee is not returnable and is not credited toward tuition.

Transcripts of all post-secondary school education should be forwarded by the registrars of the respective schools directly to the Director of Courses in Occupational Therapy. A personal interview will be arranged for each application.

ESTIMATED EXPENSES

<i>University Expenses (total program)</i>	<i>Degree Program (two years)</i>	<i>Certificate Program (one year)</i>
Tuition	\$2,200	\$1,100
University fees	96	48
Clinical supervisory fee	24	12
Books, materials, equipment, uniforms	240	190
Health and hospital fee	60	30
<i>Total</i>	<hr/> \$2,620	<hr/> \$1,380

Living Expenses (per academic year)

Room	\$340-\$485
Board	550
Subway and bus fares (within program)	65
<i>Total</i>	<hr/> \$955-\$1,100

Fees for materials and equipment in studio classes are payable at the time of registration and are subject to change in accord with market prices.

During clinical practice students spend approximately four months of the period in residence in hospitals where they receive full maintenance (room, board, and laundry). In some instances a maintenance arrangement is possible for a longer period of time.

There will be nominal transportation expenses for students in hospital affiliations outside the local area.

SUGGESTED PREPROFESSIONAL CURRICULUM

The following suggestions may be helpful to the student or guidance counsellor in planning the two-year college program prior to admission to the professional course leading to the Bachelor of Science Degree:

Six semester credits in each of the following fields: English composition, English literature, biology (including zoology), chemistry or physics, psychology, and sociology.

The remaining twenty-four credits might be chosen from such fields as speech, languages, social and political sciences, economics.

Transfer credit is usually not allowed for courses in physical education nor for any specific professional courses. A maximum of twelve credits will be allowed for courses completed in music and fine and industrial arts.

PROGRAM OF STUDY

Degree candidates take the entire program of courses listed below. Two years are spent on the campus in theoretical and technical study. To integrate the theoretical information, the student spends nine to twelve months of full-time clinical practice in psychiatric, general, pediatric, orthopedic, and tuberculosis services or hospitals. The summer periods are utilized for required clinical practice, thereby enabling the student to complete the full program in approximately two years. The program is given in outline form on pages 32-33. For electives, students should consult the bulletins of Teachers College and the School of General Studies.

Certificate candidates take only the starred courses listed below. The program is completed in seventeen months and is based on a combination of the starred courses, followed by nine to twelve months devoted to clinical practice. See pages 33-34 for a summary of the program in outline form.

The University reserves the right to withdraw or modify these courses or to change the instructors as may be necessary.

Junior Year: Autumn Term

***Occupational Therapy 11—Orientation to occupational therapy.** 1 or 2 pts. Professor Franciscus and special lecturers.

A general survey of the field. The present uses, techniques, and philosophies of occupational therapy with special references to the roles of the therapist, to professional organizations, and to historical background and recent developments. Supplementary reading and reports. Orientation visits to hospital services.

Pathology 31—Elementary studies in pathology. 1 pt. Instructor to be announced.

Lectures to outline the basic alterations which occur in body tissues due to injury and disease; alterations of function resulting from these influences.

Psychology 41—Child development. 2 pts. Dr. Lyons.

The mental, motor, social, and emotional development of the child. Special attention is given to a consideration of stress situations encountered by the child and his methods of handling these.

***Physiology 55 or 157—Human physiology. Lectures and demonstrations.** 2 pts. Drs. Nocenti (55) and Rowley (157).

A comprehensive discussion of the major organ systems of the human body and their functions, with emphasis on the physiology of exercise. Students with a minimum background of course work in biology, chemistry, and physics register for *Physiology 55*. Those who have had a comprehensive physiology course and considerable course work in biology, chemistry, and physics register for *Physiology 157*.

Neuroanatomy 95—Anatomy of the nervous system. 2 pts. Professor Sciarra.

The anatomy of the nervous system of man, including the structural unit, the cerebrospinal system, and the autonomic system. Attention will be given to the gross divisions of the brain, spinal cord, and peripheral nerves, with particular emphasis on the controls affecting voluntary motion.

***Anatomy 155—Human anatomy.** 3 pts. Professors Elftman and Noback.

Anatomy of the human body with emphasis on those features which are most important for muscular activity. Instruction is given by means of lectures and laboratory work, the latter based on prepared dissection of the human body.

O.T. Fine Arts 11—Needlecrafts. 2 pts. Miss Ericson and Mrs. Berry.

This course includes instruction in clothing construction, pattern alteration, hand and machine sewing. Also included are the various forms of embroidery, canvas stitchery, appliqué, knitting, and crocheting. Materials charge.

O.T. Fine Arts 101—Fundamentals of art and design. 2 pts. Mr. Lisenco.

A general survey course in the arts, which stresses the fundamentals of design as applied to crafts, commercial design, drawing, and painting. Museum and store visits. Lectures, readings, and discussions. Materials charge.

O.T. Fine Arts 163—Elementary woodwork. 2 pts. Mr. Lisenco.

This course is designed to orient the student to the fundamental principles of woodworking with hand tools. Careful workmanship and strong construction are stressed.

Materials charge.

Junior Year: Spring Term

***Occupational Therapy 12—Application in major medical fields.** 2 pts. Professor Francis and special lecturers.

This course stresses the principles and practice of occupational therapy techniques as applied to the tuberculous, the mentally ill, and to patients with medical and surgical diagnoses. Supplementary readings and reports. Field visits.

***Psychiatry 102—Elementary psychiatry.** 2 or 3 pts. Dr. O'Connor, Mr. Munz, and others.

Etiology and symptomatology of the major and minor psychoses including the psychoneuroses and their treatment. Lectures with clinical demonstrations and field trips.

Work for the third point includes a survey of psychological tests and measurements, and interpretation of their results for the physical and occupational therapist.

***Neurology 106—Clinical neurology.** 2 pts. Dr. Gallinek.

Etiology, symptomatology, and treatment in diseases of the brain, spinal cord, and peripheral nerves.

O.T. Fine Arts 14—General crafts. 1, 2, or 3 pts. Miss Ericson and Mrs. Berry.

This course includes many of the smaller crafts, such as: cord knotting, netting, braiding, rugmaking, chair seating, chip carving, and plastic fabrication. Emphasis is placed on basic techniques and their use in occupational therapy. Museum visit.

Materials charge.

***O.T. Fine Arts 26—Pottery.** 2 pts. Professor Mahoney.

An introduction to the possibilities and methods of using clay to create functional pottery with coils, with the potter's wheel, and by casting. Moldmaking, methods of decorating and glazing, and firing of kilns are studied for practical use in teaching.

Materials charge.

O.T. Fine Arts 30—Elementary weaving. 3 pts. Miss Ericson and Mrs. Berry.

Problems include the finger weaves and small appliances, such as cards, inkle looms, and rigid frames. Stress is laid on the mechanics and methods of weaving on two- and four-harness looms. A museum trip.

Materials charge.

O.T. Clerkship 2—Case evaluations of psychiatric patients. 2 pts. Miss Schnebly (coordinator).

Correlation of instruction in psychology, psychiatry, and occupational therapy theory by assigned patient work-ups in occupational therapy units. A rotating clinical schedule is assigned each student. Each session is followed by a seminar discussion. Required written reports and field trips.

Elective in administration and techniques of recreation. 1 pt.

Clinical Practice

Degree candidates spend June, July, and August in full-time clinical practice in psychiatry.

The clinical practice period for certificate candidates is described on page 31 below.

Senior Year: Autumn Term

Occupational Therapy 21—Departmental organization and administration. 2 pts. Miss Schnebly and special lecturers.

Study of departmental organization and administration in the various medical fields. The techniques of application of occupational therapy in geriatrics and pediatrics are included in this course. Supplementary reading, reports, and field trips.

***Clinical subjects 101—General medicine and surgery.** 2 pts. Drs. Wood and Bhonslay.

General medicine (Dr. Wood): A survey of the more common diseases with emphasis on pulmonary tuberculosis and cardiac disorders. Lectures deal primarily with the relationship of pathological physiology to the development of signs and symptoms of disease.

General surgery (Dr. Bhonslay): A survey of those common diseases for which there is surgical emphasis.

***Kinesiology 105—Applied anatomy and kinesiology.** 2 pts. Misses Brunnstrom, Dickinson, Schnebly, and others.

Application of knowledge of gross anatomy of skeletal and muscular systems to mechanics of bodily movement. Analysis of skills used in daily activities and other activities in physical and occupational therapy. Lectures and laboratory.

Rehabilitation 115—Occupational analysis and prevocational evaluation. 1 or 2 pts. Dr. Granofsky and Mr. O'Brien.

An orientation to a variety of occupational situations and to the physical, mental, and emotional demands made on the worker. Analyses are made of industrial processes and the duties of the home-maker, and consideration is given to the principles of energy conservation. The place of occupational therapy in prevocational exploration and evaluation is discussed. Films and field visits.

***O.T. Fine Arts 105-106—Interpretive design.** 2 pts. Miss Ericson and Mrs. Berry.

A course in which the principles of design are applied to occupational therapy media, such as block printing, stenciling, silk screening, and cardboard construction. Museum visit.

Materials charge.

O.T. Fine Arts 165—Advanced woodwork. 2 pts. Mr. Lisenco.

This course is a continuation of *O.T. Fine Arts 163* and includes an introduction to the uses of power machinery.

Materials charge.

***O.T. Graphic Arts 1-1R—Art of hand printing.** 1 or 2 pts. Professor Loos and Mr. Frey.

The fundamentals of printing, including instruction in type faces, proofreading, and presswork. The laboratory affords practical application of hand typesetting and operation of hand and foot presses. Films, demonstrations, and field trips.

O.T. Clerkship 3—Physical and vocational rehabilitation. 2 pts. Miss Ericson (co-ordinator).

A study of the roles and contributions of the various professional disciplines and the interrelationships of the patient service departments in a rehabilitation center. Through observation of, and active participation in, patient treatment, by attendance at clinical staff conferences and a weekly class seminar, and by written reports, students are guided to an understanding of the breadth of problems confronting the disabled and the many skills and disciplines available to help in overcoming them.

Elective in group development. 2 pts.

Senior Year: Spring Term

***Occupational Therapy 24—Application to orthopedic and neurological disabilities.** 2 pts. Misses Abbott, Wellerson, and guest instructors.

Lecture and laboratory course in application of techniques in treatment of physical injuries and diseases including orthopedic and neurological disabilities. Demonstration and return demonstration by the student.

***Clinical Subjects 102—Orthopedics.** 2 pts. Drs. Craig and Papas.

Lectures and clinical presentations descriptive of orthopedic conditions, including discussion of related problems—social, medical, surgical, and rehabilitation.

Exercise 112—Therapeutic exercise. 2 to 5 pts. Professors Snow, Darling, Hoberman, and associates.

The basic principles of therapeutic exercise including the physiology of exercise, muscle evaluation and re-education, and tests and measurements. Lectures and laboratory.

***Rehabilitation 118—Agencies and personnel in rehabilitation.** 2 pts. Miss Schnebly (coordinator), Drs. Antell, Clark, and Lindenberg, and special lecturers.

Lectures concerning community resources for the physical, psychological, social, and vocational rehabilitation of the handicapped. An orientation to preventive medicine and public health problems, including communicable and contagious diseases. Legislation and organization of both public and private health agencies are studied. Included is consideration of some of the more common pathologies affecting vision and hearing, and rehabilitation techniques.

Rehabilitation 126—Activities of daily living. 2 pts. Miss Ericson.

A laboratory course to acquaint the student with some of the materials, equipment, and techniques to aid the handicapped in attaining maximum self-sufficiency. Consideration is given to the needs of persons with motor, sensory, and emotional handicaps, as well as energy conservation techniques for the cardiac and tuberculous. Also includes some experience in making functional splints.

Materials charge.

***O.T. Fine Arts 17-18—Leatherwork.** 1 or 2 pts. Miss Ericson.

A course in hand leatherwork. Techniques of decoration and construction of small projects as used in occupational therapy.

Materials charge.

***O.T. Fine Arts 168—Metalwork and jewelry.** 2 pts. Mr. Lisenco.

A course in the basic techniques of hammered metal and jewelry. Elementary principles of mechanical drawing.

Materials charge.

O.T. Clerkship 4—Case evaluations of medical and surgical patients. 2 pts. Miss Ericson (coordinator).

Correlation of instruction in medicine, surgery, pediatrics, and occupational therapy theory by assigned patient work-ups in occupational therapy units and ward situations. A rotating clinical schedule is assigned each student. Each session is followed by a seminar discussion. Written reports and field trips.

Elective. 2 pts.

Clinical Practice

Degree candidates spend at least six months (July to January) in full-time clinical practice in specified areas of service. The list of affiliated hospitals and agencies is given on pages 34-36.

CERTIFICATE PROGRAM

Autumn Term

In addition to the starred courses listed above under autumn term, junior and senior years, the following courses must be taken:

O.T. Fine Arts 15—General crafts and needlecrafts. 1, 2, or 3 pts. Miss Ericson and Mrs. Berry.

The general crafts section of this course includes cordage, plastics, wood carving, chair seating, and rugmaking. The needlecraft section is designed to supplement the student's knowledge and to guide her in the application of all types of needlework to occupational therapy.

Materials charge.

O.T. Fine Arts 17-18—Leatherwork. 1 or 2 pts. For description, see listing above under spring term, senior year.

O.T. Fine Arts 35—Weaving. 2 pts. Miss Ericson and Mrs. Berry.

Techniques of loom and small appliance weaving are covered with particular emphasis on the mechanics of weaving and the application to occupational therapy situations. Acquaintance with the basic weaves, textures, and simple patterns is gained through the use of various fibers.

Materials charge.

O.T. Fine Arts 167—Woodwork. 2 pts. Mr. Lisenco.

A course designed to orient students in the fundamentals of woodworking and to develop a reasonable skill in the use of hand tools and finishing processes. An introduction to the use of power tools.

Materials charge.

Spring Term

In addition to the starred courses listed above under spring term, junior and senior years, the following courses must be taken (for descriptions, see listings under autumn term, senior year):

O. T. Fine Arts 105-106—Interpretive design. 2 pts.

O.T. Graphic Arts 1-1R—Art of hand printing. 2 pts.

During the spring term, candidates must also attend a weekly seminar, in which advanced theory, principles, and practice of occupational therapy are discussed.

Clinical Practice

July to April: at least nine months of clinical practice in specified areas of service (the list of affiliated hospitals and agencies is given on pages 34-36). During this period, each student must write a paper on an area of particular interest to him and one which is related to clinical experiences. He must submit his paper two months before he completes the clinical practice period.

OUTLINE OF THE PROGRAMS

DEGREE PROGRAM

Junior Year: Autumn Term

<i>O.T. Theory 11</i>	Orientation to occupational therapy	2
<i>Pathology 31</i>	Elementary studies in pathology	1
<i>Psychology 41</i>	Child development	2
<i>Physiology 55 or 157</i>	Human physiology	2
<i>Neuroanatomy 95</i>	Anatomy of the nervous system	2
<i>Anatomy 155</i>	Human anatomy	3
<i>O.T. Fine Arts 11</i>	Needlecrafts	2
<i>O.T. Fine Arts 101</i>	Fundamentals of art and design	2
<i>O.T. Fine Arts 163</i>	Elementary woodwork	2
		<hr/>
		<i>Total points</i> 18

Junior Year: Spring Term

<i>O.T. Theory 12</i>	Application in major medical fields	2
<i>Psychiatry 102</i>	Elementary psychiatry	3
<i>Neurology 106</i>	Clinical neurology	2
<i>O.T. Fine Arts 14</i>	General crafts	3
<i>O.T. Fine Arts 26</i>	Pottery	2
<i>O.T. Fine Arts 30</i>	Elementary weaving	3
<i>O.T. Clerkship 2</i>	Case evaluations of psychiatric patients	2
	Elective in administration and techniques of recreation	1
		<hr/>
		<i>Total points</i> 18

June, July, and August: Clinical practice in psychiatry

Senior Year: Autumn Term

<i>O.T. Theory 21</i>	Departmental organization and administration	2
<i>Clinical Subjects 101</i>	General medicine and surgery	2
<i>Kinesiology 105</i>	Applied anatomy and kinesiology	2
<i>Rehabilitation 115</i>	Occupational analysis and prevocational evaluation	2
<i>O.T. Fine Arts 105</i>	Interpretive design	2
<i>O.T. Fine Arts 165</i>	Advanced woodwork	2
<i>O.T. Graphic Arts 1</i>	Art of hand printing	2
<i>O.T. Clerkship 3</i>	Physical and vocational rehabilitation	2
	Elective in group development	2
		<hr/>
		<i>Total points</i> 18

Senior Year: Spring Term

<i>O.T. Theory</i> 24	Application to orthopedic and neurological disabilities	2
<i>Clinical Subjects</i> 102	Orthopedics	2
<i>Exercise</i> 112	Therapeutic exercise	2
<i>Rehabilitation</i> 118	Agencies and personnel in rehabilitation	2
<i>Rehabilitation</i> 126	Activities of daily living	2
<i>O.T. Fine Arts</i> 18	Leatherwork	2
<i>O.T. Fine Arts</i> 168	Metalwork and jewelry	2
<i>O.T. Clerkship</i> 4	Case evaluations of medical and surgical patients	2
	Elective	2
		—
<i>Total points</i>		18

July–January: Six months of clinical practice in specified areas of service

CERTIFICATE PROGRAM

Autumn Term

<i>O.T. Theory</i> 11	Orientation to occupational therapy	1
<i>Physiology</i> 55 or 157	Basic human physiology	2
<i>Clinical Subjects</i> 101	General medicine and surgery	2
<i>Kinesiology</i> 105	Applied anatomy and kinesiology	2
<i>Rehabilitation</i> 115	Occupational analysis and prevocational evaluation	1
<i>Anatomy</i> 155	Human anatomy	3
<i>O.T. Fine Arts</i> 15	General crafts and needlecrafts	3
<i>O.T. Fine Arts</i> 17	Leatherwork	1
<i>O.T. Fine Arts</i> 35	Weaving	2
<i>O.T. Fine Arts</i> 167	Woodwork	2
		—
<i>Total points</i>		19

Spring Term

<i>O.T. Theory</i> 12	Application in major medical fields	2
<i>O.T. Theory</i> 24	Application to orthopedic and neurological disabilities	2
<i>Clinical Subjects</i> 102	Orthopedics	2
<i>Psychiatry</i> 102	Elementary psychiatry	2
<i>Neurology</i> 106	Clinical neurology	2
<i>Rehabilitation</i> 118	Agencies and personnel in rehabilitation	2
<i>O.T. Graphic Arts</i> 1R	Art of hand printing	1
<i>O.T. Fine Arts</i> 26	Pottery	2
<i>O.T. Fine Arts</i> 106	Interpretive design	2
<i>O.T. Fine Arts</i> 168	Metal work and jewelry	2
		—
<i>Total points</i>		19

July–April: Nine months of clinical practice in specified areas of service

Additional requirements for all certificate candidates:

1. Attendance at a weekly seminar during the spring term. Discussions in this seminar are concerned with advanced theory, principles, and practice of occupational therapy.
2. A paper to be written during the clinical practice period in an area of particular interest to the student and related to clinical experiences. This paper is to be submitted two months prior to the completion of clinical practice.

HOSPITALS AND AGENCIES AFFILIATED FOR CLINICAL PRACTICE

The nine to twelve months of clinical practice consist of full-time practical experience in well-organized and carefully supervised occupational therapy departments under the immediate direction of registered occupational therapists. Clinical practice must be completed within one year following termination of academic work. During this period students attend lectures, clinics, staff meetings, and orientation in related treatment departments, conduct special case studies, and meet other educational requirements.

CHILDREN'S HOSPITAL, Buffalo, N.Y.

Moir P. Tanner, *Director*

Mitchell I. Rubin, M.D., *Chief of Pediatrics*

Jane E. Fogelsonger, O.T.R., *Director of Occupational Therapy*

CHILDREN'S REHABILITATION INSTITUTE, Reisterstown, Md.

Winthrop M. Phelps, M.D., *Medical Director*

Christopher H. Wiemer, *Executive Director*

Ruth W. Brunyate, O.T.R., *Director of Occupational Therapy*

COLUMBIA-PRESBYTERIAN MEDICAL CENTER HOSPITALS, New York, N.Y.

Alvin J. Binkert, *Executive Vice-President*

William Benham Snow, M.D., *Director, Clinical Physical Medicine*

Elizabeth Scully, O.T.R., *Chief Occupational Therapist*

CONNECTICUT STATE HOSPITAL, Middletown, Conn.

Edgar C. Yerbury, M.D., *Superintendent*

Franz Hasselbacher, M.D., *Clinical Director*

(Mrs.) Virginia S. Holmberg, O.T.R., *Supervisor of Occupational Therapy*

CURATIVE WORKSHOP, PHILADELPHIA SCHOOL OF OCCUPATIONAL THERAPY, Philadelphia, Pa.

Clare S. Spackman, O.T.R., *Director*

George M. Piersol, M.D., *Medical Director*

DELAWARE CURATIVE WORKSHOP, INC., Wilmington, Del.

Eleanor J. Bader, R.P.T., *Executive Director*

Mae D. Hightower, O.T.R., *Chief Occupational Therapist*

DISTRICT OF COLUMBIA HEALTH DEPARTMENT, BUREAU OF MATERNAL AND CHILD HEALTH, Washington, D.C.

Ella Oppenheimer, M.D., *Chief*

Handicapped and Crippled Children's Unit

Frances Brennecke, M.D., *Chief*

Rena M. Graham, O.T.R., *Director of Occupational Therapy*

HARTFORD REHABILITATION CENTER, INCORPORATED, Hartford, Conn.

June Sokolov, O.T.R., *Executive Director*

Edward Scull, M.D., *Supervising Medical Consultant*

Patricia Plaisted, O.T.R., *Supervisor of Occupational Therapy*

INSTITUTE FOR THE CRIPPLED AND DISABLED, New York, N.Y.

Willis C. Gorthy, *Executive Director*

John Untereker, M.D., *Medical Director*

Thelma L. Wellerson, O.T.R., *Director of Occupational Therapy*

MONTEFIORE HOSPITAL, New York, N.Y.

Martin Cherkasky, M.D., *Director*

Karl Harpuder, M.D., *Chief, Physical Medicine and Rehabilitation*

Lottie I. Barth, O.T.R., *Director of Occupational Therapy*

NEWINGTON HOME AND HOSPITAL FOR CRIPPLED CHILDREN, Newington, Conn.

Berger E. Foss, *Executive Director*

John C. Allen, M.D., *Physiatrist*

Mary Fiorentino, O.T.R., *Director of Occupational Therapy*

NEW YORK CITY DEPARTMENT OF HOSPITALS

Bruce B. Grynbaum, M.D., *Director of Rehabilitation and Physical Medicine*

Bellevue Hospital

(Mrs.) Olive W. Weinbach, O.T.R., *Supervisor of Occupational Therapy*

NEW YORK HOSPITAL, New York, N.Y.

Children's Clinic

S. Z. Levine, M.D., *Pediatrician-in-Chief*

Michi Yasumura, O.T.R., *Director of Pediatric Occupational Therapy*

Main Hospital

Henry N. Pratt, M.D., *Director*

Eva Mazur, O.T.R., *Director of Occupational Therapy*

Payne Whitney Psychiatric Clinic

Oskar Diethelm, M.D., *Psychiatrist-in-Chief*

Mildred A. Spargo, O.T.R., *Director of Occupational Therapy*

NEW YORK STATE DEPARTMENT OF HEALTH, DIVISION OF TUBERCULOSIS CONTROL

Robert E. Plunkett, M.D., *Assistant Commissioner*

M. Arlene Mellinger, O.T.R., *Supervisor of Occupational Therapy*

Mount Morris Tuberculosis Hospital, Mount Morris, N.Y.

Frank L. Armstrong, M.D., *Medical Director*

Unabelle Emm, O.T.R., *Director of Occupational Therapy*

NEW YORK STATE DEPARTMENT OF MENTAL HYGIENE

Paul H. Hoch, *Commissioner*

Virginia M. Scullin, O.T.R., *Director of Occupational Therapy*

New York State Psychiatric Institute, New York, N.Y.

Lawrence C. Kolb, M.D., *Director*

(Mrs.) Alice R. Trei, O.T.R., *Senior Occupational Therapist*

NEW YORK STATE REHABILITATION HOSPITAL, West Haverstraw, N.Y.

Seymour S. Bluestone, M.D., *Director*

Morton Hoberman, M.D., *Chief, Rehabilitation Services and Research*

Viola W. Svensson, O.T.R., *Director of Occupational Therapy*

NORWICH STATE HOSPITAL, Norwich, Conn.

Ronald H. Kettle, M.D., *Superintendent*

Harry Kromer, R.N., O.T.R., *Supervisor of Occupational Therapy*

REHABILITATION CENTER, LIBERTY MUTUAL INSURANCE CO., Boston, Mass.

Kenneth N. Palmer, *Manager*

Thomas L. DeLorme, M.D., *Medical Director*

F. Elizabeth Shepard, O.T.R., *Director of Occupational Therapy*

THE REHABILITATION CENTER FOR THE PHYSICALLY HANDICAPPED, INC., Stamford, Conn.

Ruby C. Oscarson, R.P.T., *Executive Director*

Charles G. McKendree, M.D., *Medical Director*

Barbara Neuhaus, O.T.R., *Chief Occupational Therapist*

U. S. ARMY HOSPITALS

Office of the Surgeon General, Washington, D.C.

Ruth A. Robinson, Col., A.M.S.C.; *Chief, Army Medical Specialist Corps*

Myra L. McDaniel, Lt. Col., A.M.S.C.; *Chief, Occupational Therapist Section, Army Medical Specialist Corps*

U. S. PUBLIC HEALTH SERVICE HOSPITAL, Boston, Mass.

Alexander A. Doerner, M.D., *Medical Officer in Charge*

Margaret L. Blodgett, O.T.R., *Chief Occupational Therapist*

VETERANS ADMINISTRATION HOSPITALS

Central Office, Washington, D.C.

A.B.C. Knudson, M.D., *Chief, Physical Medicine and Rehabilitation Division*

George D. Frye, O.T.R., *Chief, Occupational Therapy Section*



0050083597

ACADEMIC CALENDAR, 1959-1960

AUTUMN TERM

- September 21 Monday, through September 23, Wednesday. Registration, including payment of fees.*
- September 24 Thursday. Classes begin.
- October 3 Saturday. Last day for change of program.
- October 28 Wednesday. Award of October degrees and certificates.
- November 3 Tuesday. Election Day. Holiday.
- November 26 Thursday, through November 29, Sunday. Thanksgiving holidays.
- December 1 Tuesday. Last day for filing application or renewal of application for degrees and certificates to be awarded in February.†
- December 21 Monday, through January 3, Sunday. Christmas holidays.
- January 18 Monday, through January 28, Thursday. Midyear examinations.

SPRING TERM

- February 1 Monday through February 2, Tuesday. Registration, including payment of fees.*
- February 3 Wednesday. Classes begin.
- February 13 Saturday. Last day for change of program.
- February 24 Wednesday. Award of February degrees and certificates.
- March 1 Tuesday. Last day for filing application or renewal of application for all degrees and certificates to be conferred in June.†
- April 10 Sunday, through April 17, Sunday. Easter holidays.
- May 16 Monday, through May 26, Thursday. Final examinations.

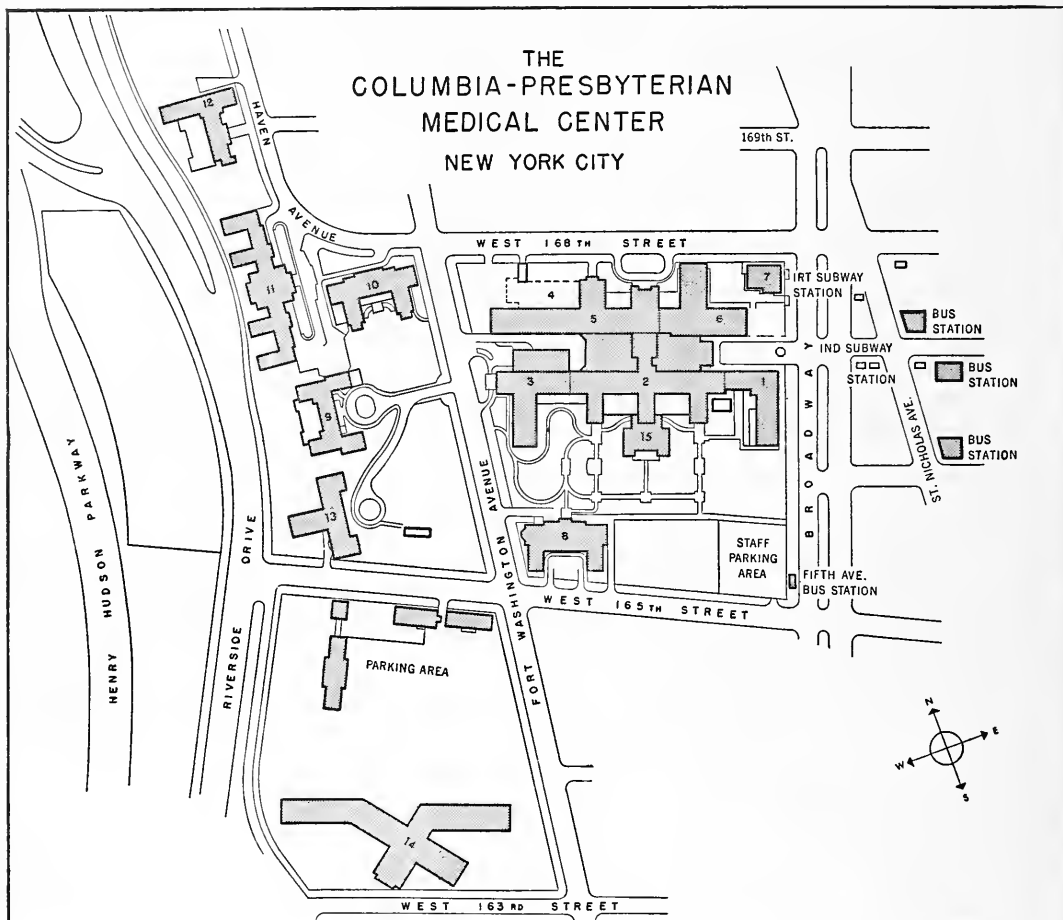
COMMENCEMENT

- May 29 Sunday. Baccalaureate Service.
- June 1 Wednesday. Conferring of degrees and certificates.

-
- August 1 Monday. Last day for filing application or renewal of application for degrees and certificates to be awarded in October.†

* Students allowed to register after the period specified must pay a late fee.

† Students who file application after this date must pay a late fee.



- | | |
|---|---|
| 1. BABIES HOSPITAL | 7. N. Y. CITY DEPT. OF HEALTH
SCHOOL OF PUBLIC HEALTH AND
ADMINISTRATIVE MEDICINE |
| 2. PRESBYTERIAN HOSPITAL
N. Y. ORTHOPAEDIC HOSPITAL
SLOANE HOSPITAL
SQUIER UROLOGICAL CLINIC | 8. INSTITUTE OF OPHTHALMOLOGY |
| 3. HARKNESS PAVILION | 9. MAXWELL HALL |
| 4. POWER HOUSE | 10. NEUROLOGICAL INSTITUTE |
| 5. COLLEGE OF PHYSICIANS AND
SURGEONS | 11. N. Y. STATE PSYCHIATRIC INSTITUTE |
| 6. VANDERBILT CLINIC
SCHOOL OF DENTAL AND ORAL
SURGERY | 12. BARD HALL |
| | 13. HARKNESS MEMORIAL HALL |
| | 14. FRANCIS DELAFIELD HOSPITAL,
N. Y. C. |
| | 15. PAULINE A. HARTFORD MEMORIAL
CHAPEL |